

AMENDMENTS TO THE CLAIMS:

Please amend claims 1, 2, 5-8, 15 and 16 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A fibre-optic sensor array (15) for a surveillance system (10) characterised in that, the sensor array ~~comprises~~comprising:
at least two fibre-optic point sensors; ~~and (16), in which each pair of successive point sensors is linked by~~
a distributed fibre-optic sensor (18) linking said at least two fibre-optic point sensors,
wherein said sensor array provides an array output of sensed data from said at least two fibre-optic point sensors and said distributed fibre-optic sensor.

2. (currently amended) A fibre-optic surveillance system (10) ~~characterised in that the system comprises~~including a fibre-optic sensor array (15) according to claim 1 and further including connected to an interrogation system, said interrogation system, (12) which is adapted to respond responsive to said sensed data output from said array indicative of an optical phase shift in at least one sensor of the array due to a force applied to at least one of said sensors that sensor and to establish the, for establishing a position at which said force is applied.

3. (original) A fibre-optic surveillance system according to claim 2 wherein the fibre-optic sensor array is connected to the interrogation system by a fibre-optic cable.

4. (original) A fibre-optic surveillance system according to claim 2 wherein the fibre-optic sensor array is connected to the interrogation system by a transducer and a wire cable.

5. (currently amended) A fibre-optic surveillance system according to claim 2 wherein each of the fibre-optic points sensors comprises optical fibre wound into a flexural disc.

6. (currently amended) A fibre-optic surveillance system according to claim 2 wherein the fibre-optic points sensors are geophones.

7. (currently amended) A fibre-optic surveillance system according to claim 2 wherein each fibre-optic point sensors comprises a fibre-optic accelerometer.

8. (currently amended) A fibre-optic surveillance system according to claim 2 wherein the distributed fibre-optic sensors comprises optical fibre packages within a cable to measure one of pressure on the cable and bend of the cable.

9. (original) The system of claim 2 wherein the interrogation system comprises an interferometric interrogation system.

10. (original) The system of claim 9 wherein the interferometric interrogation system comprises a reflectometric interferometric interrogation system.

11. (original) The system of claim 10 wherein the reflectometric interferometric interrogation system comprises a pulsed reflectometric interferometric interrogation system.

12. (original) The system of claim 11 wherein the pulsed reflectometric interferometric interrogation system employs time-division multiplexing to distinguish individual sensors.

13. (original) The system of claim 2 wherein the interrogation system comprises a Rayleigh-backscatter interrogation system.

14. (original) The system of claim 13 wherein the Rayleigh-backscatter interrogation system comprises a pulsed Rayleigh-backscatter interrogation system.

15. (currently amended) A method of establishing the position at which an object moving on a surface crosses a ~~closed path, or an open path of fixed length, thereon, characterised in that~~ wherein said method comprises the steps of:

(i) positioning a fibre-optic sensor array according to claim 1 ~~on or below~~ adjacent said path; and

(ii) analysing optical signals received from the sensor array to establish the position of the object ~~along crossing the path, or the position at which the object has crossed said path.~~

16. (currently amended) A method according to claim 15, wherein the optical signals are analysed by measuring the delay between ~~the~~ signals received from adjacent said at least two fibre-optic points sensors along the array and combining these signals with ~~the~~ a signal from the

distributed fibre-optic array linking ~~these~~said at least two fibre-optic point sensors to locate and confirm ~~the~~ said position.